

Greetings Mirror Lake Residents,

Please find the latest bioassessment report for your lake below. Key highlights of this update include:

- Seminole County Fertilizer Ordinance
- Hydrilla status
- Submersed aquatic vegetation (SAV)
- Native emergent vegetation
- Herbicide treatment for lily pads
- Invasive emergent vegetation
- Recommendations for you and your waterbody

Seminole County recently passed a fertilizer ordinance in an effort to reduce nutrient loading of waterbodies like Myrtle Lake. The new ordinance places restrictions on the type of fertilizers used, time of fertilization, and placement of fertilizers. For more information about Seminole County's fertilizer ordinance please visit Seminolecountyfl.gov/fertilizer

On **April 20th, 2017**, Seminole County Lake Management staff, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Mirror Lake**.

Only a few sprigs of hydrilla were found around the lake. Hydrilla was found to a maximum depth of 2 feet. At this time no action for hydrilla is needed.

Eight species of native submersed aquatic vegetation (SAV) were found during the inspection. These native species included: lemon bacopa to 4 ft, stonewort to 3 ft, eelgrass to 7 ft, southern naiad to 4 ft and three species of bladderwort to 7 ft. Lemon bacopa and bladderwort was found expanding around the lake with bladderwort being the dominant species.

Photo: Bladderwort (native).



Native emergent vegetation found during the survey included: golden canna, spikerush, pennywort, duck weed, hempvine, american lotus, spatterdock, fragrant water lily, banana lily, maidencane, pickerelweed, duck potato, carolina willow, cordgrass, and cattail. Banana lily has expanded inshore and can be identified by its white blooms. Lily pads have been treated by the Seminole County herbicide contractor in both the northern and southern part of the lake. Some of the large rhizomes (roots) from the decaying plant material has risen to the surface. These rhizomes will sink back to the bottom of the lake over time.

Photo: Example of banana lily (native).



Invasive emergent vegetation included: alligator weed, wild taro, primrose willow, torpedograss, and cuban bur-head sedge. Primrose willow, cuban bur-head sedge and torpedo grass were all showing signs of treatment.

The Secchi measurement (water clarity) was visible on bottom in a total depth of 7 feet. The water elevation at the time of inspection was 57.44 feet above sea level. Seven sterile grass carp were observed during this inspection.



Recommendations for your waterbody:

- 1 Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as county or state biologists), and discuss lake specific issues, especially nutrients/lake management recommendations. SCLMP staff will be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shorelines (such as pickerelweed, duck potato, and canna).
- 2 Consider increasing street sweeping services during times of peak leaf fall to ensure that this debris does not enter waterways. Leaf debris contains high levels of phosphorous that can negatively impact your lakes.
- 3 Increase educational outreach programs, i.e. Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal pollution by: decreasing fertilizer usage, using only phosphorous free and slow release nitrogen types of fertilizers, keeping a functional shoreline with beneficial native aquatic plants, and by keeping grass clippings out of your lake and the stormdrains that lead to the lake. All of these activities aid in protecting your lake! Contact Seminole County Lake Management Program (407) 665-2439 for more information regarding the free educational programs available.
- 4 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list so that these reports can be shared with everyone. Valuable information is contained within these assessments.